

# RESERVE COPY

## PATENT SPECIFICATION



Application Date: Aug. 7, 1937. No. 21818/37.

499,506

Complete Specification Left: July 16, 1938.

Complete Specification Accepted: Jan. 25, 1939.

### PROVISIONAL SPECIFICATION

#### Improvements in and relating to Bedsteads and other Articles of Furniture

We, HOSKINS AND SEWELL LIMITED, a Company duly incorporated under the Laws of Great Britain, of Midland Works, Bordesley, in the City of Birmingham, and HERBERT RONALD HOSKINS, a British Subject, of the Company's address, do hereby declare the nature of this invention to be as follows:—

10 This invention relates to bedsteads and other articles of furniture of the kind provided with a castor or castors adapted to be moved from an inoperative position to an operative position for the purpose of facilitating movement of the bedstead or other article of furniture from one place to another.

The invention is particularly applicable to bedsteads for use in hospitals. Such bedsteads are usually provided at their front ends with a pair of legs which are normally in contact with the floor, and with a castor or castors adapted normally to occupy an inoperative position out of contact with the floor. Ordinarily the connection between the castor or castors and the fixed frame of the bedstead is effected by a telescopic member or members which can be extended by a screw device for moving the castor or castors into contact with the floor and for lifting the legs out of contact with the floor.

35 The object of the present invention is to provide improved means for moving the castor or castors into and out of the operative position.

The invention comprises the combination with a telescopic member or members carrying the castor or castors, of link and lever mechanism for extending and retracting the said member or members.

45 In one manner of applying the invention to a metal bedstead for use in

hospitals, we pivot on a support carrying the castor or castors one end of a lever the other end of which is adapted for hand manipulation. At an intermediate position the lever is connected by a curved or other link to a fixed part on the bedstead frame, which part is connected to the castor support by a vertical telescopic member or members. The lever is adapted to be moved between suitable stops to either side of a dead centre position in which the pivot axes of the link are in the same plane as the pivot axis of the lever. Movement of the lever to one side of the dead centre position causes the telescopic member or members to be extended and retained in this condition, whilst movement of the lever to the other side of the dead centre position causes the said member or members to be retracted and retained in this condition.

When the telescopic member or members is or are contracted the castor or castors occupy an inoperative position out of contact with the floor, and the front of the bedstead is supported by a pair of legs, but when the said member or members is or are extended the castor or castors is or are in contact with the floor and the legs are out of contact with the floor.

By the present invention the castor or castors can be moved into and out of an operative position by the simple movement of an operating lever.

The invention is not limited to the example described above as subordinate details may be varied to meet different requirements. Further the invention is not limited to bedsteads as it may be applied to dinner wagons, trollies and other articles of furniture.

Dated this 6th day of August, 1937.

MARKS & CLERK.

### COMPLETE SPECIFICATION

#### Improvements in and relating to Bedsteads and other Articles of Furniture

We, HOSKINS AND SEWELL LIMITED, a Company duly incorporated under the Laws of Great Britain, of Midland Works, Bordesley, in the City of

[Price 1/-]

Birmingham, and HERBERT RONALD HOSKINS, a British Subject, of the Company's address, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to bedsteads and other articles of furniture of the kind provided with a castor or castors adapted to be moved from an inoperative position to an operative position for the purpose of facilitating movement of the bedstead or other article of furniture from one place to another:

The invention is particularly applicable to bedsteads for use in hospitals. Such bedsteads are usually provided at their front ends with a pair of legs which are normally in contact with the floor, and with a castor or castors adapted normally to occupy an inoperative position out of contact with the floor. Ordinarily the connection between the castor or castors and the fixed frame of the bedstead is effected by a telescopic member or members which can be extended by a screw device for moving the castor or castors into contact with the floor and for lifting the legs out of contact with the floor.

It has, however, already been proposed to effect the connection between the castor or castors and the fixed frame of the bedstead by mounting the castor or each castor on a slidable sleeve embracing a leg of the bedstead, or on the lower end of a slidable rod passing vertically through a fixed tubular support on the bedstead, the movement of the castor or each castor into and out of the operative position being effected by the action on the sleeve, or on the upper end of the rod, of link and lever mechanism. The object of the present invention is to provide improved means for moving the castor or castors into and out of the operative position.

The invention comprises the combination with a telescopic member or members carrying the castor or castors, of link and lever mechanism for extending and retracting the said member or members, the said mechanism being formed in part by a lever pivoted at one end to a castor support carried by the telescopic member or members, and in part by a link connecting an intermediate portion of the lever to the bedstead frame.

In the accompanying sheet of explanatory drawings:—

Figure 1 is a part sectional side elevation of a metal bedstead provided with the invention.

Figures 2 and 3 are similar sectional

end views of the bedstead, the vertically movable castors being shown in their inoperative positions in Figure 2, and in their operative positions in Figure 3.

In the drawings *a* indicates the side members of the bedstead frame which are secured at their ends to the head *b* and foot *c* of the frame. The head *b* is provided with a pair of legs as *d* which at their lower ends are provided with castors as *e*. The foot *c* is also provided with a pair of legs *f*, but the lower ends of these legs are not provided with castors. Extending between and secured to the front legs *f* is a horizontal member *g* from which depend the outer parts *h* of vertical telescopic members. The inner parts *i* of these telescopic members extend from the upper side of a horizontal support *j* which is situated below the horizontal member *g*, and which carries a pair of castors *k* adapted to be moved by the telescopic members into and out of contact with the floor.

In applying the present invention to the bedstead above described, we pivot on the rear side of the support *j* carrying the castors *k* one end of a lever *m* the other end of which is formed or provided with a handle *n*. At an intermediate position the lever *m* is connected by a curved or other link *o* to a support *p* secured on the upper side of the horizontal member *g* extending between the front legs *f* of the bedstead frame. The lever *m* is adapted to be moved between suitable stops to either side of a dead centre position in which the pivot axes of the link *o* are in the same plane as the pivot axis of the lever. In the example shown these stops are formed by the ends of a member *q* which serves as a guide for the lever *m*, and which is secured at its ends to the rear side of the horizontal member *g*. Movement of the lever *m* to one side of the dead centre position causes the telescopic members *h*, *i* to be extended and retained in this condition, whilst movement of the lever to the other side of the dead centre position causes the telescopic members to be retracted and retained in this condition. In both of the extreme positions of the lever *m* the weight of the bedstead frame serves to oppose movement of the lever, but as an additional safeguard for preventing unintentional movement of the lever in the direction for retracting the telescopic members *h*, *i*, a tension spring *r* is preferably arranged as shown between an anchorage on the pivoted end of the lever and an anchorage on the castor support *j*.

When the telescopic members *h*, *i* are contracted the castors *k* occupy an inoperative position out of contact with the

floor, and the front of the bedstead is supported by the front legs *f* as shown in Figures 1 and 2, but when the telescopic members are extended the castors *k* are in contact with the floor and the legs *f* are out of contact with the floor as shown in Figure 3. Preferably the upper portion of the lever *m* is arranged at an angle to the remainder of the lever so that when the bedstead is in its normal position, as shown in Figures 1 and 2, the upper portion of the lever occupies an unobtrusive position parallel with and adjacent to the horizontal member *g*.

The invention is not limited to the example described above as subordinate details may be varied to meet different requirements. For example, instead of the pair of castors above described a single castor may be employed for supporting the foot of the bed, and this castor may be carried by one or more telescopic members. Further the invention is not limited to bedsteads as it may be applied to dinner wagons, trollies and other articles of furniture.

By the present invention the castor or castors can be moved into and out of an operative position by the simple movement of an operating lever.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to

be performed, we declare that what we claim is:—

1. Means for moving into and out of an operative position the castor or castors of a bedstead or other article of furniture of the kind specified, comprising the combination with a telescopic member or members carrying the castor or castors, of link and lever mechanism for extending and retracting the said member or members, the said mechanism being formed in part by a lever pivoted at one end to a castor support carried by the telescopic member or members, and in part by a link connecting an intermediate portion of the lever to the bedstead frame.

2. Means as claimed in Claim 1, in which the lever is adapted to lie on one side of a dead centre position when the telescopic member or members is or are extended, and on the other side of the dead centre position when the telescopic member or members is or are retracted, stops being provided for determining the extreme positions of the lever.

3. Means as claimed in Claim 1 and comprising the combination and arrangement of parts substantially as described and as illustrated in the accompanying drawings.

Dated this 8th day of July, 1938.

MARKS & CLERK.

*[This Drawing is a reproduction of the Original on a reduced scale.]*

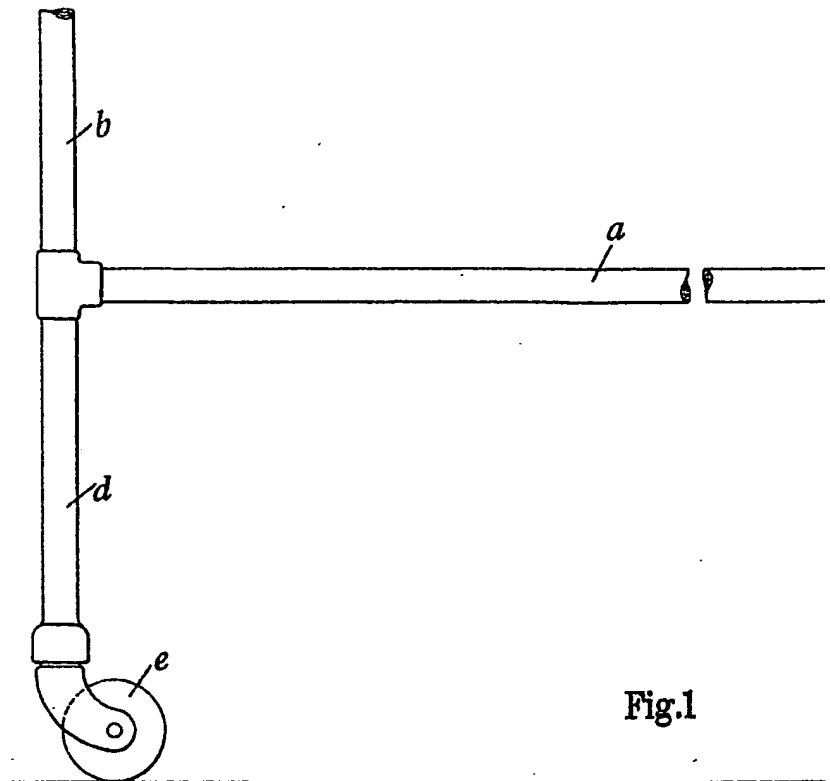


Fig.1

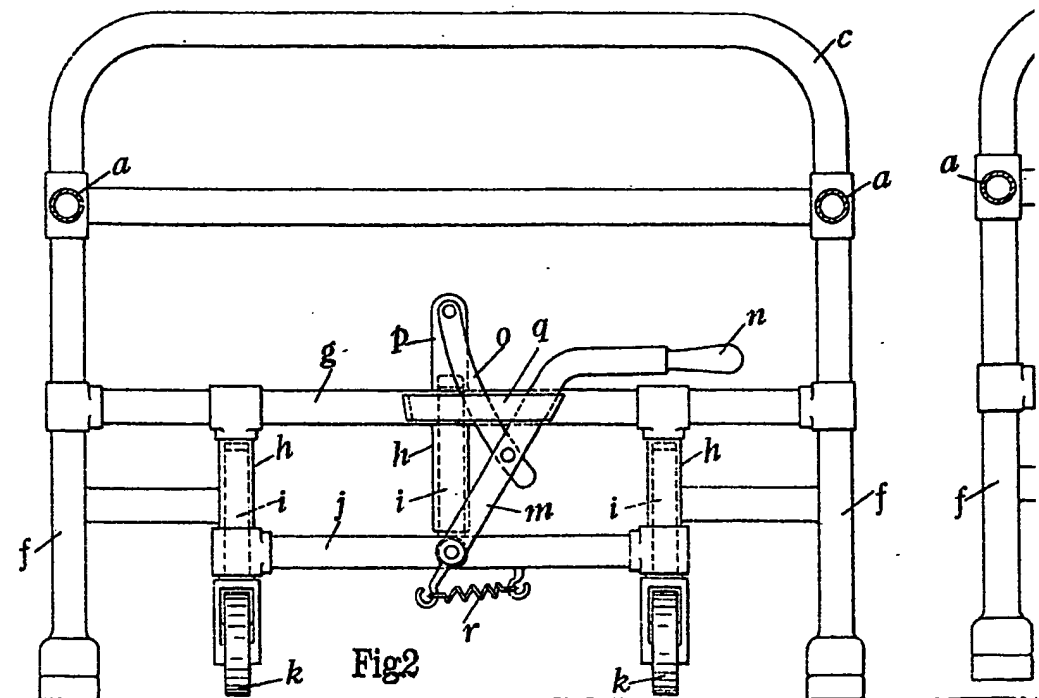


Fig.2

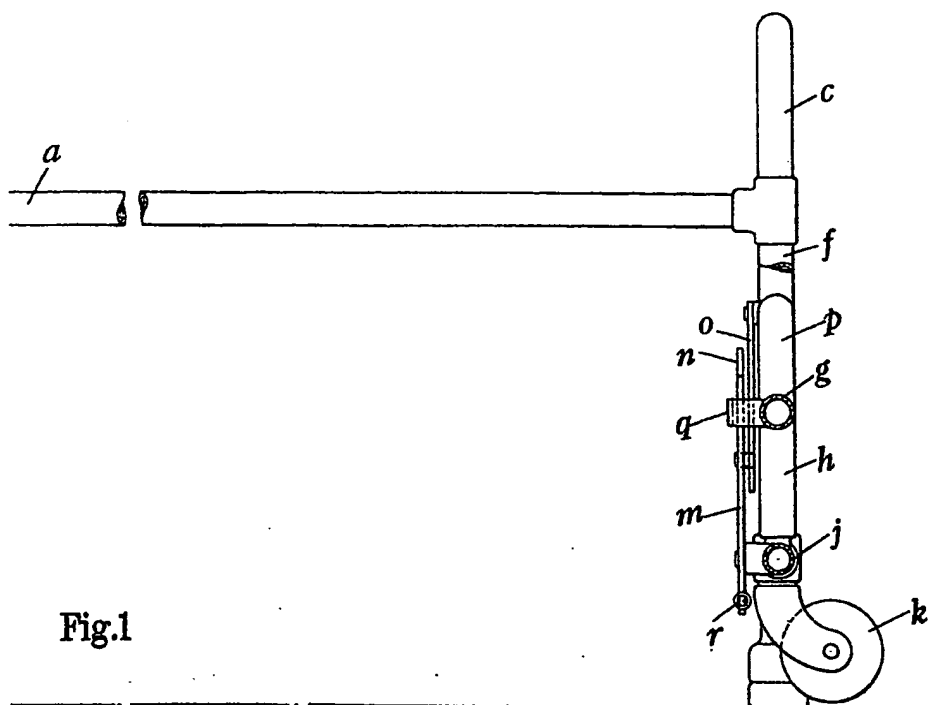


Fig. 1

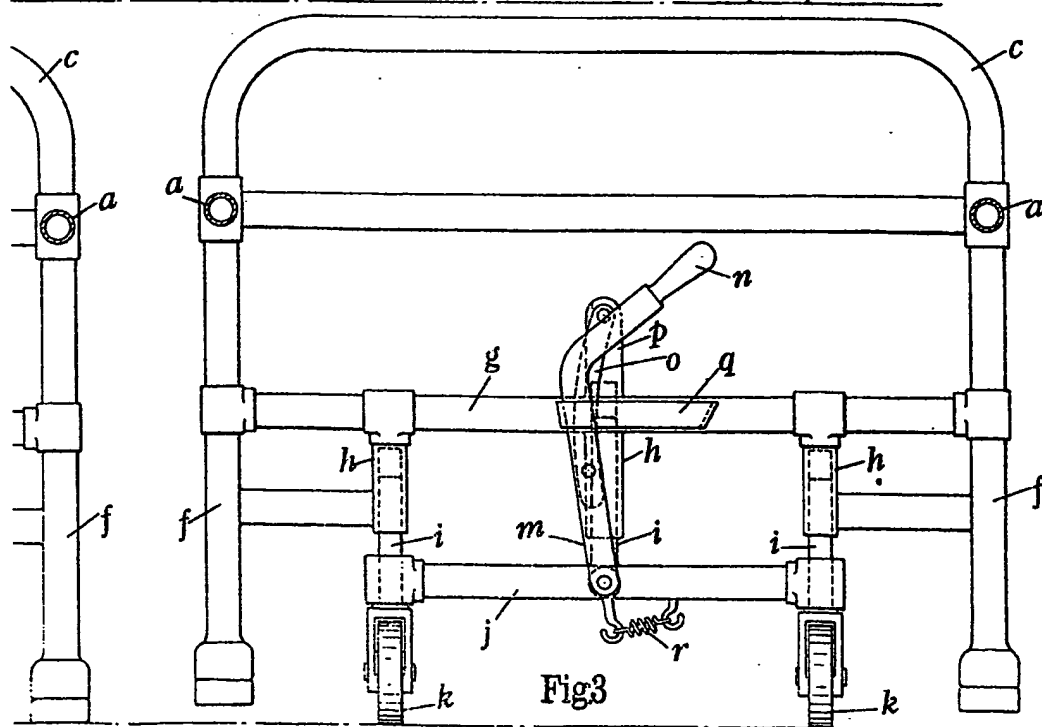


Fig. 3

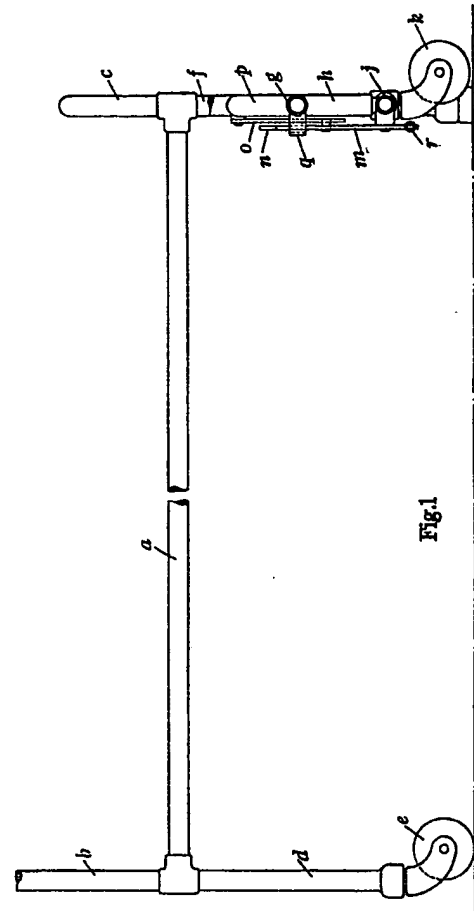


Fig. 1

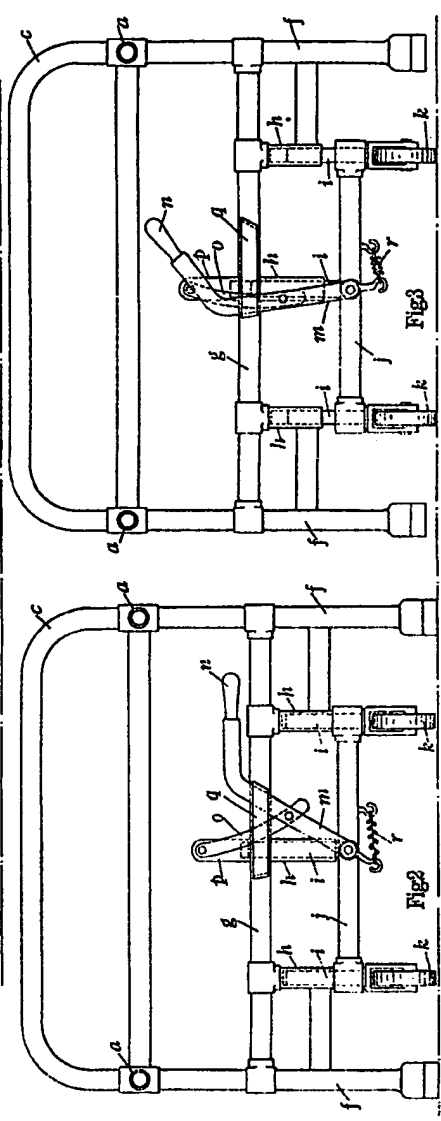


Fig. 2

Fig. 3

[This Drawing is a reproduction of the Original on a reduced scale]